

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for determining a surface illuminated by incident light by recording the intensity ($I_1(x,y)$) in light reflected from the surface in a first image thereof and by recording the intensity ($I_2(x,y)$) in light reflected from the surface in a second image thereof, taken with another angle of illumination and complementary to the first image, ~~characterised by~~ comprising:

recording the intensity of only diffusely reflected light over the surface in the ~~two~~ first and second images, and

~~determination of~~ determining the difference between the recorded intensities of diffusely reflected light over the surface in the first and second images in order to obtain a representation that ~~emphasises~~ emphasizes variations in gradient of the surface.

2. (Currently Amended) The method according to claim 1, ~~characterised in that~~ further comprising:

normalizing the difference ~~is normalised~~ in order to obtain an image that is reflectance-neutral and which represents variations in gradient, that is, a derivative of the height function of the surface.

3. (Currently Amended) ~~The method~~ Method according to claim 2, ~~characterised in that~~ wherein the difference is ~~normalised~~ normalized by division by a sum $(I_1(x,y) + I_2(x,y))$ of the recorded intensities of the surface.

4. (Currently Amended) The method according to claim 3, ~~characterised in that~~ wherein the sum $(I_1(x,y) + I_2(x,y))$ of the recorded intensities over the surface is used to obtain an essentially topographically neutral reflectance image of the surface.

5. (Currently Amended) The method according to claim 1, ~~characterised in that~~ further comprising:

recording the intensity of the first image ~~is recorded~~ with light incident from a first direction and ~~that~~

recording the intensity of the second image ~~is recorded~~ with light incident from a second direction that is opposite to the reflection angle of the first direction.

6. (Currently Amended) The method according to claim 1, ~~characterised by calculation of~~ further comprising calculating the derivative of the area by

$$f'_x(x,y) \approx \frac{1}{\tan Y} \frac{I_1(x,y) - I_2(x,y)}{I_1(x,y) + I_2(x,y)}$$

where Y is the angle of incidence of the light.

7. (Currently Amended) The method according to claim 6, ~~characterised by further comprising~~ Fourier transformation of the derivative and multiplication thereof by a Wiener filter in order to suppress noise in the recorded intensities.

8. (Currently Amended) The method according to claim 7, ~~characterised by integration of~~ further comprising integrating the derivative in order to obtain the height function of the surface.

9. (Currently Amended) The method according to claim 1, ~~characterised by polarisation of~~ further comprising polarizing the incident light and thereto crosswise ~~polarisation~~ polarization of the reflected light in order to eliminate reflections in the surface and obtain the ~~said~~ diffusely reflected light.

10. (Currently Amended) The method according to claim 1, ~~characterised in that~~
wherein the first image is recorded with light in a first wavelength region and that
the second image is recorded with light in a second wavelength region, distinct
from the first wavelength region.

11. (Currently Amended) The method according to claim 10, ~~characterised in that~~
wherein the first image is recorded by illumination with light of a first frequency
and that the second image is recorded by illumination with light of a second
frequency that deviates from the first frequency.

12. (Currently Amended) The method according to claim 11, ~~characterised in that~~
further comprising recording the first and the second images ~~are recorded~~
simultaneously.

13. (Previously Presented) Use of the method according to claim 1 for determining
the topography of a paper surface.

14. (Currently Amended) The method according to claim 6, ~~characterized by~~
~~integration of~~ further comprising:

integrating the derivative in order to obtain the height function of the
surface.

15. (Currently Amended) The method according to claim 10, ~~characterized in that~~
further comprising:

recording the first and the second images ~~are recorded~~ simultaneously.